New Hampshire Department of Environmental Services Waste Management Division 603 271-2047

OUTLINE FOR ORGANIZING A HOUSEHOLD HAZARDOUS WASTE COLLECTION PROJECT

Steps

- Form a community based household hazardous waste (HHW) committee
- Research which household materials constitute HHW
- Investigate potential corporate sponsors
- Research funding sources
- Develop a citizen HHW awareness educational program
- Choose a HHW collection date and time
- Select a convenient HHW collection location
- Contract a State of NH registered hazardous waste transporter for HHW collection services
- Review NH <u>Hazardous Waste Rules</u>, Env-Wm 1003, "Household Hazardous Waste Collection Projects" regarding compliance regulations and grant application form requirements
- Advertise the HHW collection project to residents of participating communities

Funding Sources

- State of NH grant monies
- Local community funding (i.e., warrant article, line item of solid waste management budget)
- Solid waste district funding
- Corporate donations
- Funding from the NH Charitable Fund
- Adopt the local "Vehicle Registration Fee" (RSA 261:153, V) to generate funds

Educational outreach suggestions

Contact:

- Local television stations
- Local radio stations
- Local and regional newspapers
- Local solid waste operators and the regional planning commission director
- Local civic organizations

Topics:

- Dangers of Household Hazardous Products
- Changing Purchasing Habits
- Alternative Household Products

Speak at:

- Town meetings
- Planning board and conservation commission meetings
- School assemblies
- Civic group meetings

Distribute HHW information brochures at:

- Public buildings such as Town or City Hall, transfer station or recycling center, libraries
- Schools
- Businesses such as retail paint stores, hardware stores, supermarkets

It is important to educate the public about the hazards of and alternatives for household hazardous products.

EXAMPLE LETTER OF COMMITMENTHOUSEHOLD HAZARDOUS WASTE COLLECTION PROJECT

The community of	nereby commits to partic	ipate and cooperate with the
community of in a H	ousehold Hazardous Waste Colle	ection Project on
The community hereby grants	the authority to represent the community in	
organizing the collection project.		
The City / Town of	has appropriated \$	for the purpose of
allowing all residents of the commu	nity access to the Household Haz	zardous Waste Collection
Project		
	Authorized Ager	nt for Participating Community
	Community Nar	ne
**********	Authorization D	
	ESTED WARRANT ARTICLE ARDOUS WASTE COLLECTION	
To see if the Town of	_ will vote to raise and appropria	ate the sum of \$
to contribute to a local or regional H	Iousehold Hazardous Waste Coll	ection Project. The Project
will provide residents access to a ho	ousehold hazardous waste collect	ion to dispose of household
generated hazardous waste such as	oil based paints, paint thinners, so	olvents, pesticides and spent
antifreeze. Further, the project will a	also seek to educate citizens abou	at the adverse consequences
of improper household hazardous w	aste disposal.	

PREPARING FOR THE EVENT SUGGESTIONS FOR SITE SELECTION AND CHOOSING A HAZARDOUS WASTE CONTRACTOR HOUSEHOLD HAZARDOUS WASTE COLLECTION PROJECT

Site Selection

- Choose a site that is conveniently located for the majority of residents in the participating communities.
- A good HHW collection site is one, which provides a safe environment for handling hazardous waste.
- Select a site which provides parking for 20-30 cars such as a:

Department of Public Works Garage Community solid waste transfer station or recycling center School or municipal building parking lot

- The area where the waste is collected and packaged shall be set up on an impermeable, non-absorbent surface so spills can be easily contained and cleaned up.
- The site should provide shelter for the HHW collection workers handling the wastes. In the event of inclement weather, the workers and the containers of HHW must be kept dry. If the site does not provide adequate shelter, the contractor should provide a temporary tent.
- Seek approval for the selected site from the local government and the NH Department of Environmental Services.

Choosing a Hazardous Waste Contractor

- Costs may vary from each contractor based on: the rates for HHW disposal; the distance to the hazardous waste disposal facility; the waste management option used for the waste; the amount and type of HHW collected; and the number of staff assigned to the collection.
- Contractors' services for HHW programs can vary in cost. Some contractors act as "brokers" while others may own the hazardous waste disposal facility where the collected HHW is brought. In the latter case, a better treatment/disposal price may be obtained, however, other costs may be higher.
- After receiving bid responses from potential contractors, compare line item costs closely. Some contractors may charge a high cost on one waste stream but low on another waste stream. Do careful cost comparisons.
- Check the contractors HHW collection experience level with household hazardous waste programs and their service records (i.e. compliance with State and federal laws)
- Ask the contractor to work with you, the organizer, to help reduce your community's costs. Suggest to the contractor
 that they consolidate similar HHW instead of lab packing and recycle paint products and used motor oil. Inquire of the
 contractors' waste handling capabilities before accepting the final bid.

SUGGESTIONS FOR REDUCING COSTS OF A HOUSEHOLD HAZARDOUS WASTE COLLECTION PROJECT

- Solicit volunteer help for publicity, educational campaigns and support services for the HHW
 collection project such as traffic control, conducting participant surveys and assisting the
 community organizer as requested.
- Request that local businesses and industries donate equipment and materials, or volunteer personnel for the helping in the HHW collection. Volunteers from local area businesses, government agencies and educational institutions may reduce labor costs for the event. Participation by local business and industry may result in positive public relations with the community and boost community spirit for the importance of the proper management of HHW.
- When soliciting bids from potential HHW contractors, request that the bid be based on the number of household served by the collection event rather than by the types and amounts of HHW collected.
- Reduce the amount of HHW by reducing the generation of HHW at the source, the consumer. In a communities' resident educational effort, the organizer should encourage residents to use non-hazardous alternatives for cleaning fluids, pesticides and other hazardous products. Encourage residents to purchase only as much of a hazardous material as they will consume.
- Reduce the amount of HHW being collected at the one day HHW collection event. For example, oil-based and latex paints typically comprise up to 70% of the HHW collected. Organizers of HHW collections can reduce the quantity of paint by participating in a recycling program that uses feedstock from a community paint collection program. The collection of paints must occur at a NH Department of Environmental Services (DES) permitted Solid Waste Facility (call 271-2047 for details). Used oil can be used as fuel for heating a public works garage, transfer station or other public building. A DES grant program can provide information and funding up to \$2,500 for used oil recycling (call 271-7837 or 1-888-TAKEOIL for details).
- Have a separate table/area set aside at your events or establish a permanent swap shop for reusable products. Attendees can take the useable products home, thereby eliminating the cost of disposal, and providing a service to the community.
- Work with surrounding communities to establish regional HHW collections. This will reduce each community's HHW handling costs. Contact NHDES to find out what communities in your area are participating.
- New Hampshire Hazardous Waste regulations allow government entities to self-transport HHW without a manifest in Town vehicles operated by Town employees to a permitted disposal facility or an approved HHW Collection Project provided they have the required training in handling HHW. A Bill of Lading needs to be in the vehicle listing all the contents. This allows for town managed "satellite" collections (collection that occurs in an area outside

of the approved collection project that is run by a New Hampshire registered hazardous waste hauler).

• Universal Waste Rules allows for specific wastes (household batteries, mercury containing devices, cathode ray tubes, antifreeze, and some pesticides) to be subject to less stringent requirements than other hazardous waste thus decreasing the cost of managing them. For more information check out the EPA website at: www.epa.gov/epaoswer/hazwaste/id/univwast.htm.

Examine long term solutions for HHW management including establishing regional, permanent HHW collection centers. By establishing a permanent HHW collection center, the participating communities can reduce the cost of HHW disposal by storing partially filled containers of HHW until subsequent collections can fill them.

Due to new Hazardous Waste Rule changes adopted in August of 2000, Grantees are no longer required to supply copies of the **WORK PLAN** or **SITE SAFETY PLAN**. It is required, however, that the Grantee and participants complete both of these plans and ensure everyone involved in the project is familiar with them.

WORK PLAN/RUNNING THE EVENT HOUSEHOLD HAZARDOUS WASTE COLLECTION PROJECT

The following Work plan describes how the Community Collection Day Organizer (organizer) and its hazardous waste contractor (contractor) should handle the household hazardous waste (HHW) activities on the collection day.

Material Flow

As a homeowner arrives at the designated facility, posted signs should direct him to the reception area. At that point, organizer representatives should meet the incoming vehicle and survey the participant: name, residence location, types and approximate amounts of HHW brought to the collection (Participant Survey provided by the State of NH). The homeowner is offered educational information describing the environmental effects from the improper disposal of HHW, alternative, non-toxic household products and proper HHW disposal. Also, educational material is offered which describes the environmental effects from the improper disposal of HHW.

The participant proceeds to the unloading area where the contractor should remove the HHW from the vehicle and take it to the handling tables. At this point, the contractor takes custody and becomes the "Generator" of the waste.

In the event that a collection day participant exceeds the maximum amount of waste accepted for disposal (usually 10 gallons or approximately 85 pounds), the organizer's Project Manager shall be advised. The excess waste should only be accepted with the authority of the organizer's Project Manager.

The contractor should segregate "known" wastes from "unknown" wastes. Separate tables should be used. Known wastes should be transferred from their table to one of three repackaging tables: solvents, corrosives, and pesticides/poisons. The contractor's personnel must man those tables, repackage the wastes as necessary, record information about the wastes for manifest purposes and containerize them as necessary. The wastes must be packaged on-site so that they may be properly managed (recycled or disposed).

The contractor's personnel should transfer unknown wastes from the collection table to the analysis area. The contractor must conduct a simple chemical analysis on these wastes to determine the appropriate classification. Following classification, the wastes shall then be packaged for transportation to an authorized hazardous waste facility.

Once a shipping container has been filled with waste, it shall be properly sealed and labeled for shipment. Manifests should be completed and approved by the contractor and all wastes shall be properly packaged and manifested prior to transportation. Upon completion of the collection at the end of the day, the vehicle shall transport the wastes to an authorized treatment and disposal facility.

Personnel Requirements and Duties

Reception Area

The organizer's personnel must be present at the reception area. Their tasks should be to screen participants for residency and the amounts of HHW to be dropped off, and to direct vehicle traffic to the proper collection location.

Collection Area

The organizer's personnel should be present at the collection area to maintain order, answer participants' questions and to conduct the required survey. They may help unload the HHW from the participants' vehicles with the permission of the contractor's Project Manager. They must then transfer the wastes to the "known" and "unknown" tables as deemed appropriate by the contractor's Project Manager.

The organizer's Project Manager must supervise and assist with the off loading of the HHW only with the permission of the contractor. If questions or a dispute regarding the quantities or types of HHW to be disposed of arises, the organizer's Project manager or designated employee, that is experienced or trained in hazardous waste determination, shall resolve them. As a general guideline, if the amount of HHW slightly exceeds the allowable disposable quantities allowed, the participant's HHW should not be turned away. If a participant brings in excessive amounts of HHW, that waste might be accepted with the authority of the organizer's Project Manager.

The minimum number of contractor personnel required is:

- 1 Project Manager/Safety Officer
- 1 Chemist
- 2-4 Recovery Technicians (dependent on the estimate of the volume of HHW anticipated by the organizer's Project Manager)

Small Quantity Generator (SQG) Waste

New Hampshire Hazardous Waste Regulations allow SQG waste to be taken during HHW collections, as long as the HW is manifested, received during a one day collection, and given directly to a New Hampshire registered HW transporter.

Equipment

To facilitate traffic movement of participants and to assure the flow and repackaging of HHW, the contractor should provide the following equipment:

Reception Area

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1 Tent (approximately 9' x 12')
1 Table (4' x 8')
3 Chairs
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Collection Area

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1 Tent (approximately 9' x 12')
3 Tables (4' x 8')
10 mil Polyethylene (to underlie and spread 3' in front of the handling tables and repackaging tables)
5 Chairs
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Analysis Area

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1 Tent (approximately 9' x 12')
Lab trailer or lab station with cover
2 Tables (3' x 8')
2 Chairs
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Miscellaneous

Box trailer with power tailgate 24 traffic cones

Dumpster Eyewash unit

Banner tape 1 Portable toilet

Rack truck Decontamination equipment

Portable emergency shower Fire extinguishers

Expendable supplies (by contractor)

Tyvek suits Soda ash

Half face respirators with organic vapor cartridges and pesticide cartridges

Gloves (surgical and chemical protective)

Boots

Labels (DOT Warning, Hazardous materials)

DOT approved shipping containers

Vermiculite or "Speedi Dri" for lab packing

"Speedi Dri" for absorbing spills Hazardous waste manifest forms Eyewash liquid Pencils and pens Clipboards Decontamination liquids

SITE SAFETY, SPILL RESPONSE AND EMERGENCY RESPONSE PLAN HOUSEHOLD HAZARDOUS WASTE COLLECTION PROJECT

It is important to recognize that in the handling of HHW, extreme caution should be taken to prevent any accidents, spills or fires. With unprotected citizens on or near the collection site, serious consequences could result from any mishap. The contractor's Project Manager shall be responsible to implement a safety plan and provide assurances that all of the contractor and organizer's personnel are familiar with the safety precautions, spill cleanup procedures and evacuation plans. The contractor's Project Manager is also responsible for notifying and coordinating spill, accidental release or fire response protocols with the local fire department and with the organizer's Project Manager.

Site Safety

For the purposes of assigning levels of personal protection, each collection site should be divided into three distinct sections, each requiring specific personal protection and safety requirements.

Waste Handling Area

This area encompasses all "active" areas of the waste collection site where waste materials are being examined, analyzed, packaged or opened. The waste handling area encompasses those areas where the HHW becomes the responsibility of the contractor, known and unknown waste stations, drum packaging stations and the analysis area.

The contractor should provide <u>Level C</u> personal protective equipment for persons working within this area. <u>Level C</u> protective equipment includes:

- Half face, air-purifying respirator with Organic Vapor Cartridges and Pesticide Cartridges as appropriate
- Chemical protective coveralls (Tyvek or equivalent)
- Gloves (inner: surgical, outer: chemical protective)
- Boots (chemical protective)
- Full face shields

Collection Area

These are locations within the collection sites where participant surveys are completed, wastes are accepted from residents and wastes are being presented to the contractor for packaging and analysis.

The contractor should provide <u>Level D</u> personal protective equipment for persons working within this area. <u>Level D</u> protective equipment includes:

- Coveralls (cotton or Tyvek at the waste handling area)
 Gloves (surgical)
 Boots or safety shoes
 Safety glasses (when handling any wastes)

Analysis Area

This area is within the Waste Handling Area where the contractor's Chemist and Technician classify and analyze the waste for proper handling and packaging for transportation to an authorized hazardous waste facility.

Clean Area

The organizer's Project Manager and contractor's Project Manager should designate a location at each collection site as a Clean Area. It is only within this area that the organizer's personnel and contractual personnel will be allowed to take breaks, smoke or eat meals. The area will be located away from and upwind of the unloading and packaging areas. All personnel should remove protective equipment and wash before entering the Clean Area.

Safety Procedures

It is the responsibility of the contractor's Project Manager to enforce the following safety practices:

- Eating, drinking, chewing gum or tobacco, smoking or any other practice which increases the
 probability of hand to mouth transfer and ingestion of hazardous material is prohibited in any
 area where the possibility of contamination exists.
- Hands and shoes must be thoroughly washed upon leaving the Work Area and before eating, drinking or any other activities take place.
- Thorough body washing should occur whenever emergency decontamination procedures for outer garments are required. The washing should occur immediately after the outer garments have been removed.
- No excessive facial hair, which could interfere with the satisfactory fit of the respirator mask to face seal, will be allowed on personnel required to wear protective respirators.
- Unnecessary contact with contaminated or suspected contaminated surfaces should be avoided. Whenever possible, all personnel should avoid: walking through puddles, mud or other discolored liquids; kneeling on the ground; leaning, sitting or placing equipment on drums, containers or waste transportation vehicles.
- Medically prescribed drugs for personnel on response operations where the potential for absorption, inhalation or ingestion of toxic substances exists should only be used after consultation with a qualified physician.
- Alcoholic beverage intake is prohibited.

Spill Response and Evacuation Procedures

The contractor's Project Manager and/or other contractual personnel shall be responsible for coordinating the rapid response and thorough cleanup of all spills that may occur at the collection site. Predetermined evacuation routes should be designated by the contractor's Project Manager after consultation with the on-scene fire department personnel and the organizer's Project Manager. The contractor shall follow a recommended and accepted response and cleanup protocol such as outlined in NH <u>Hazardous Waste Rules</u>, Env-Wm 513 and Env-Wm 608 (Emergency / Remedial Action).